In measuring the impact of a statewide law for clean indoor air, researchers in Missouri examined self-reported data on ETS exposure from 1990 through 1993 (Brownson et al. 1995a). Nonsmokers' exposure to ETS in the workplace declined slightly the year the law was passed and substantially more after the law went into effect. Exposure to ETS in the home remained constant over the study period; this finding suggests that the declining workplace exposure was more likely linked to the smoking regulations than to the overall declining smoking prevalence observed during the study period. Despite improvements over time, ETS exposure in the workplace remained at 35 percent in the final year of the study (1993). Other data from California indicate that nonsmokers employed in workplaces with no policy or a policy not covering their part of the workplace were eight times more likely to be exposed to ETS (at work) than those employed in smoke-free workplaces (Borland et al. 1992).

Attitudes Toward Restrictions and Bans

Studies of awareness and attitudes toward workplace smoking restrictions and bans have been conducted in cross-sectional samples of the general population and among employees affected by bans. In a 1989 survey of 10 U.S. communities, most respondents favored smoking restrictions or smoke-free environments in all locations, including workplaces, government buildings, restaurants, hospitals, and bars (CDC 1991). Although support for smoking restrictions was higher among nonsmokers, across the 10 communities, 82–100 percent of smokers favored restrictions on smoking in public places. Support was highest for smoking bans in indoor sports arenas, hospitals, and doctors' offices. A 1993 survey from eight states showed greater support for ending smoking in fast-food restaurants and at indoor sporting events than in traditional restaurants and indoor shopping malls (CDC 1994a).

Support for proposed changes may differ from support for actual, implemented changes. Yet in studies of smoke-free hospitals, patients, employees, and physicians have overwhelmingly supported the policy (Rigotti et al. 1986; Becker et al. 1989; Hudzinski and Frohlich 1990; Baile et al. 1991; Offord et al. 1992). In some instances, a majority of smokers support a smoke-free hospital (Becker et al. 1989). Studies of smoking restrictions and bans in other industries also have found that nonsmokers overwhelmingly favor smoke-free workplaces (Petersen et al. 1988; Borland et al. 1990b; Gottlieb et al. 1990; Sorensen et al. 1991b). Time—and consequent habituation—can make changes more acceptable. In a prospective study of a smoking ban in a large workplace, Borland and colleagues (1990b) found that attitudes of both nonsmokers and smokers toward the smoke-free workplace were more favorable six months after such a policy was implemented. Although most smokers reported being inconvenienced, they also reported that they recognized the overall benefits of the policy. Two studies from Massachusetts found that one and two years after two local laws for clean indoor air were enacted, 65 percent of the businesses surveyed favored the law (Rigotti et al. 1992, 1994). The authors concluded that a self-enforcement approach achieved high levels of awareness (about 75 percent) and intermediate levels of compliance (about 50 percent) (Rigotti et al. 1994).

Effects of Restrictions and Bans on Nonsmokers' Exposure to ETS

As has been found in population-based research, studies conducted in individual workplaces have found that smoke-free workplaces have been effective in reducing nonsmokers' exposure to ETS. Effectiveness has been measured by the perceived change in air quality in the workplace after a smoke-free policy was instituted (Biener et al. 1989; Gottlieb et al. 1990) and by measurement of nicotine vapor before and after such a policy (Stillman et al. 1990). Conversely, workplace policies that allow smoking in designated areas without separate ventilation result in substantial exposure to ETS for nonsmokers (Repace 1994).

An analysis of the effects of a smoke-free workplace in The Johns Hopkins Medical Institutions found that concentrations of nicotine vapor had declined in all areas except restrooms at one to eight months after the ban (Stillman et al. 1990). In most areas, nicotine concentrations after the ban were below the detectable level of 0.24 $\mu g/m^3$.

Effects of Restrictions on Smoking Behavior

An additional benefit from regulations for clean indoor air may be a reduction in smoking prevalence among workers and the general public. For example, in a multivariate analysis, moderate or extensive laws for clean indoor air were associated with a lower smoking prevalence and a higher proportion of quitters (Emont et al. 1993). Another study also found an association between local smoking restrictions and smoking prevalence (Rigotti and Pashos 1991).

Table 5.2. Summary of studies on the effects of a smoke-free workplace on smoking behavior

Authors/year	Location	Industry	Sample size
Andrews 1983	Boston, Massachusetts	Hospital	965
Rigotti et al. 1986	Boston, Massachusetts	Hospital pediatric unit	93
Rosenstock et al. 1986	Puget Sound, Washington	Health maintenance organization	447
Petersen et al. 1988	Connecticut	Insurance company	1,210
Becker et al. 1989	Baltimore, Maryland	Children's hospital	704
Biener et al. 1989	Providence, Rhode Island	Hospital	535
Scott and Gerberich 1989	Midwestern United States	Insurance company	452
Borland et al. 1990b	Australia	Public service	2,113
Centers for Disease Control 1990c	Pueblo, Colorado	Psychiatric hospital	1,032
Gottlieb et al. 1990	Texas	Government agency	1,158
Hudzinski and Frohlich 1990	New Orleans, Louisiana	Hospital	1,946
Stillman et al. 1990	Baltimore, Maryland	Hospital	2,877
Baile et al. 1991	Tampa, Florida	Hospital	349
Borland et al. 1991	Australia	Telecommunications company	620
Sorensen et al. 1991a	New England	Telephone company	1,120
Brenner and Mielck 1992	Germany	National random sample	439
Goldstein et al. 1992	Augusta, Georgia	Hospital	1,997
Offord et al. 1992	Rochester, Minnesota	Hospital	10,579
Wakefield et al. 1992b	Australia	Representative sample	1,929
Jeffery et al. 1994	Minneapolis-St. Paul, Minnesota	Diverse worksites	32 worksites; total number of individuals not reported

Change in individual or overall smokers' consumption	Change in prevalence
Not reported	–8.5% at 20 months follow-up
–2.3 cigarettes per shift ($P < 0.01$) at 12 months follow-up; no change in overall consumption	No significant change
–2.0 cigarettes per day ($P < 0.003$) at 4 months follow-up	No significant change
–5.6 cigarettes per day at 12 months follow-up	1.6% at 12 months follow-up
No change at 6 months follow-up	–1.2% at 6 months follow-up
–3.9 cigarettes per day at work at 12 months follow-up	No significant change
22.5% of smokers decreased consumption at 7 months follow-up	–5.1% at 7 months follow-up
–7.9 cigarettes per day in smokers of 25 or more cigarettes per day at 6 months follow-up	–1.0% at 6 months follow-up
–3.5 cigarettes per day at work at 13 months follow-up; –1.8 cigarettes per day over 24 hours	–4.0% at 13 months follow-up
12.0% reduction in consumption of 15 or more cigarettes per day at work at 6 months follow-up ($P < 0.001$)	–3.4% at 6 months follow-up
25% of smokers no longer smoked at work at 12 months follow-up	Not reported
–3.3 cigarettes per day at 6 months follow-up ($P = 0.0001$)	–5.5% at 6 months follow-up
40% of smokers decreased consumption at 4 months follow-up	–1.5% at 4 months follow-up
–3.5 cigarettes per day at 18 months follow-up ($P < 0.05$)	–3.1% at 18 months follow-up
Not reported	21% of smokers quit at 20 months follow-up
–1.8 cigarettes per day in men, –1.4 cigarettes per day in women	Cessation proportion of 30%
57% of smokers reported they had cut down on number of cigarettes smoked	9% of smokers stated they had quit because of the ban
Not reported	–2.9% at 30 months follow-up
–5 cigarettes per day on workdays vs. leisure days	Not reported
–1.2 cigarettes per day	–2% at 24 months follow-up

In recent years, researchers have increasingly recognized the role of the environment[5] in influencing individual smoking behavior through perceived cues (NCI 1991; McKinlay 1993; Brownson et al. 1995b), many of which have their origins in generally held rules about acceptable behaviors (i.e., social norms) (Robertson 1977). Smokers frequently respond to environmental cues when deciding whether to smoke at a given time (NCI 1991). For example, a smoker may receive a personal, habit-derived cue to smoke after a meal or on a work break, but this cue may be weakened (and eventually even canceled) by a social, policy-derived cue not to smoke if the person is in a smoke-free restaurant or worksite (Brownson et al. 1995b).

Numerous studies have assessed the potential effects of workplace smoking bans on employee smoking behavior (Table 5.2). These studies have been conducted in health care settings (Andrews 1983; Rigotti et al. 1986; Rosenstock et al. 1986; Becker et al. 1989; Biener et al. 1989; CDC 1990c; Hudzinski and Frohlich 1990; Stillman et al. 1990; Baile et al. 1991; Goldstein et al. 1992; Offord et al. 1992), government agencies (Gottlieb et al. 1990), insurance companies (Petersen et al. 1988; Scott and Gerberich 1989), and telecommunications companies (Borland et al. 1991; Sorensen et al. 1991a) and among random samples of the working population (Brenner and Mielck 1992; Wakefield et al. 1992b). Most of the studies based in hospitals or health maintenance organizations that banned smoking found a decrease in the average number of cigarettes smoked per day. Several of the hospital studies found significant declines in the overall prevalence of smoking among employees at 6–20 months follow-up (Andrews 1983; Stillman et al. 1990). Studies of smoking behavior in other industries have found similar results; in most settings, daily consumption, overall smoking prevalence, or both had decreased at 6–20 months after workplaces were made smoke free.

In a population-based study of California residents, the prevalence of smoking was 14 percent in smoke-free workplaces and 21 percent in workplaces with no smoking restrictions (Woodruff et al. 1993). Consumption among continuing smokers was also lower in smoke-free workplaces, and the percentage of smokers contemplating quitting was higher. In 1992, Patten and colleagues (1995a) followed up a large sample of persons (first interviewed in 1990) to determine the influences a change in worksite setting might have had on smoking. These researchers observed a statistically nonsignificant increase in smoking prevalence among the group that changed from a smoke-free workplace to one at which smoking was permitted. The prevalence of smoking among other groups was unchanged or had declined. Although these results are tentative, particularly in view of sampling difficulties during the follow-up interview, they signal the potential impact workplace policies can have on smoking behavior.

[5]The term "environment" is defined broadly to include the legal, social, economic, and physical environment (Cheadle et al. 1992).

Case Studies of State and Local Smoking Restrictions

Recent reviews have presented case studies on the passage of state and local laws for clean indoor air (Samuels and Glantz 1991; Fourkas 1992; Jacobson et al. 1992; Traynor et al. 1993). These studies describe the issues that states and local communities dealt with in enacting smoking restrictions in public places.

In a case study of six states, the ability of key legislators to support legislation and the existence of an organized smoking prevention coalition were key determinants of whether statewide legislation was enacted for clean indoor air (Jacobson et al. 1992). Although the enactment of such legislation was not guaranteed when these factors were favorable, enactment was unlikely when they were unfavorable. Two other factors were cited as key in enacting legislation in the six states studied: an active executive branch that pressured the legislature to act, especially by making such legislation an executive policy priority, and existing local ordinances that created a policy environment favorable to the enactment of statewide smoking restrictions.

The study found that coalitions that succeeded in enacting legislation to restrict smoking in public places featured organized commitment, including both a full-time staff and a professional lobbyist. Successful coalitions also had established close working relationships with key legislative sponsors to develop appropriate policy alternatives and to coordinate legislative strategy. Finally, effective coalitions used media and grassroots campaigns to mobilize public support for smoking restrictions.

Another important component in the legislative debate was how the issue of smoking restrictions was framed. In all six states reviewed, the tobacco industry tried to shift the focus from the credibility of the scientific evidence on the health hazards of ETS to the controversial social issue of personal freedom; specifically, the industry lobbied extensively for including nondiscrimination clauses in legislation to restrict smoking (Malouff et al. 1993). Another common strategy that

the tobacco industry has used is to support the passage of state laws that preempt more stringent local ordinances (Brownson et al. 1995b).

Because of the possible countereffect of preemptive legislation and because of the difficulty in enacting statewide legislation, public health advocates have suggested that advocates for reducing tobacco use should devote more resources to enacting local ordinances (Samuels and Glantz 1991; Fourkas 1992; Jacobson et al. 1992). A local strategy can usually impose more stringent smoking restrictions than statewide legislation does. Like the study of Jacobson and colleagues (1992) on statewide initiatives, a study of local initiatives found that two key ingredients for success were the presence of a strong smoking prevention coalition and sympathetic political leadership within the elected body (Samuels and Glantz 1991).

Minors' Access to Tobacco

Introduction

Minors' access to tobacco products is an area of regulation relatively free from the social and legal debate that often arises from other regulatory efforts. Even the staunchest opponents of reducing tobacco use concede that tobacco use should be limited to adults and that retailers should not sell tobacco products to children and adolescents. Yet as was discussed in detail in the Surgeon General's report on smoking among young people, a significant number of minors use tobacco, and a significant number of them obtain their tobacco through retail and promotional transactions, just as adults do (USDHHS 1994; CDC 1996a,b; Kann et al. 1998). Whether intended exclusively for adults or not, these commercial transactions are supported by vast resources. The multibillion-dollar tobacco industry spends a large proportion of its marketing dollars to support a vast network of wholesale and retail activity. In 1997, cigarette makers spent $2.44 billion on promotional allowances to the wholesale and retail trade and an additional $1.52 billion on coupons and retail value-added promotions (FTC 1999). These figures were 42 percent and 26 percent, respectively, of the entire $5.1 billion spent on advertising and promoting cigarettes in the United States that year.

In general, the availability of cigarettes to the adult population has not been a regulatory issue since the first quarter of the 20th century (see Chapter 2), although recent FDA statements about nicotine levels in cigarettes have raised the possibility of some regulation of adult use (see "Further Regulatory Steps," earlier in this chapter). The primary regulatory focus for cigarette access has been on reducing the sale of tobacco products to minors (Forster et al. 1989; Hoppock and Houston 1990; Thomson and Toffler 1990; Altman et al. 1992; CDC 1992a; Cummings et al. 1992; *Federal Register* 1993, 1996). Broad-based public support for limiting minors' access to tobacco has developed in the relatively brief time (since the mid-1980s) that this issue has been in the public eye (DiFranza et al. 1987, 1996; CDC 1990a,b,c, 1993a, 1994a, 1996a,d; Jason et al. 1991; Hinds 1992; Keay et al. 1993; Landrine et al. 1994, 1996; USDHHS 1994).

Reducing the commercial availability of tobacco to minors is a potential avenue for reducing adolescent use. Growing evidence suggests that tobacco products are widely available to minors. Uniformly, surveys find that teenagers believe they can easily obtain cigarettes (see, for example, Forster et al. 1989; Johnston et al. 1992; CDC 1996a; Cummings et al. 1998; University of Michigan 1999). As noted, this access is by no means confined to borrowing cigarettes from peers or adults or stealing them at home or from stores; purchase from commercial outlets is an important source for minors who use tobacco. An estimated 255 million packs of cigarettes were illegally sold to minors in 1991 (Cummings et al. 1994), and daily smokers aged 12–17 years smoked an estimated 924 million packs of cigarettes in 1997 (DiFranza and Librett 1999). Between 20 and 70 percent of teenagers who smoke report purchasing their own tobacco; the proportion varies by age, social class, amount smoked, and factors related to availability (Forster et al. 1989; Response Research, Incorporated 1989; CDC 1992a, 1996a,d; Cummings et al. 1992, 1998; Cummings and Coogan 1992–93; Mark Wolfson, Ami J. Claxton, David M. Murray, and Jean L. Forster, Socioeconomic status and adolescent tobacco use: the role of differential availability, unpublished data). In a review of 13 local

over-the-counter access studies published between 1987 and 1993, illegal sales to minors ranged from 32 to 87 percent with an approximate weighted-average of 67 percent. Several local studies published in 1996 and 1997 found somewhat lower over-the-counter sales rates to minors: 22 percent (Klonoff et al. 1997) and 29 percent (CDC 1996) in two separate studies in California and 33 percent in Massachusetts (DiFranza et al. 1996). Nine studies of vending machine sales to minors published between 1989 and 1992 found illegal vending machine sales ranging from 82 to 100 percent with an approximate weighted-average of 88 percent (USDHHS 1994). Comparison of the results of these research studies with the results of later statewide Synar surveys (see below) is problematic for four reasons: (1) the research studies were generally local surveys of a town, city, or county, whereas the Synar surveys are based on statewide samples; (2) the sampling methods vary across the research studies; (3) store inspection methodologies vary; and (4) some of the research studies contain results of several surveys, often pre- and post-intervention (USDHHS 1998a).

Several factors suggest that widespread reduction in commercial availability may result in reduced prevalence or delayed onset of tobacco use by young people: the reported importance of commercial sources to minors, the easy commercial availability that has been demonstrated, and the reductions in commercial availability demonstrated when legal restrictions have been tightened, as outlined below (Jason et al. 1991; DiFranza et al. 1992; Hinds 1992; Forster et al. 1998). One psychological study supports the potential impact of limiting minors' access to cigarettes (Robinson et al. 1997). In this investigation of 6,967 seventh graders of mixed ethnicity, the best predictor of experimentation with cigarettes was the perception of easy availability. Regular smoking was heavily influenced by cost (see Chapter 6).

Direct studies of factors that influence minors' access have produced mixed results, however. Several investigators found that state laws on minimum age for purchasing tobacco products did not by themselves have a significant effect on cigarette smoking among youth (Wasserman et al. 1991; Chaloupka and Grossman 1996). Other studies have provided evidence in single communities (without comparison groups) that compliance with youth access regulations does lead to reductions in regular smoking by adolescents (Jason et al. 1991; DiFranza et al. 1992). In a nonrandomized, controlled community trial (three intervention and three control communities), Rigotti and colleagues (1997) found that although illegal sales rates to minors decreased significantly more in the control communities than in the intervention communities, there was no difference between control and intervention communities in either self-reported access to tobacco from commercial sources or in smoking behavior among youth. The authors suggest that illegal sales rates were not reduced sufficiently in the intervention communities to cause a decrease in commercial access that was substantial enough to impact youth smoking. Noting that these studies were limited by their scope or sample size, Chaloupka and Pacula (1998) analyzed data from the 1994 Monitoring the Future surveys on 37,217 youths. Using personal and ecologic variables in a two-part multivariate model to estimate cigarette demand by youth and average daily cigarette consumption, the investigators found that adolescents are less likely to smoke and that those who smoke consume fewer cigarettes in the following settings: where prices are higher, in states that use cigarette excise tax revenues for tobacco control activities, where there are stronger restrictions on smoking in public places, and in states that have adopted comprehensive approaches to measuring retailer compliance with youth access laws. The authors concluded that comprehensive approaches, including enforcement of minors' access laws, will lead to a reduction in youth smoking. A large, community-based clinical trial—seven intervention and seven control communities—also found an intervention effect (Forster et al. 1998). In this study, communities that developed new ordinances, changes in merchant policies and practices, and changes in enforcement practices experienced a significantly smaller increase in adolescent smoking than did the control communities. Further exploration of this issue may be required to substantiate the impact of the enforcement of minors' access laws.

As commercial sales to minors are decreased, there is evidence that minors may shift their attempts to obtain cigarettes to "social" sources, e.g., other adolescents, parents, or older friends (Hinds 1992; Forster et al. 1998). One study found that adult smokers aged 18 and 19 years were the most likely group of adults to be asked by a minor for cigarettes (Ribisl 1999). This study did not assess how frequently minors asked other minors for tobacco. There is also evidence, however, that minors who provide tobacco to other minors are more likely to purchase tobacco than other minors who smoke (Wolfson 1997), and in any event, some of the cigarettes provided by minors to other minors were initially purchased from commercial sources (Forster et al. 1997). Whether the source is social or commercial, it is clear that a comprehensive approach to reducing minors' access is needed; smokers of all ages

in addition to tobacco retailers must avoid provision of tobacco to minors.

Efforts to Promote Adoption and Enforcement of Minors' Access Laws

Public organizations at the federal, state, and local levels have become active in encouraging state and local jurisdictions to adopt and enforce minors' access laws. The NCI-ACS collaboration known as ASSIST (American Stop Smoking Intervention Study) has identified reducing minors' access to tobacco products as one of its goals for its 17 demonstration states. The Robert Wood Johnson Foundation's SmokeLess States program also encourages funded states to address minors' access. The USDHHS has widely distributed a model state law as a result of an investigation by the Office of Inspector General (OIG) reporting little or no enforcement of state laws on minimum ages for tobacco sales (OIG 1990; USDHHS 1990). *Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youth*, a report from the Institute of Medicine (IOM), includes an extensive study of minors' access and a series of recommendations about state and local laws in this area (Lynch and Bonnie 1994). A group of 25 state attorneys general formed a working group on the issue and released a set of recommendations regarding retail sales practices and legislation aimed at reducing tobacco sales to minors (Working Group of State Attorneys General 1994).

Efforts to curb illegal sales to minors have also occurred at the federal level. The former FDA program (see description in Chapter 7) was a major effort for several years. Probably the most sustained and widespread attention to the issue of minors' access laws and their enforcement was precipitated by the U.S. Congress, which in 1992 adopted the Synar Amendment as part of the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (Public Law 102-321, sec. 1926), which amended the Public Health Service Act. This provision requires states (at the risk of forfeiting federal block grant funds for substance abuse prevention and treatment) to adopt laws establishing minimum ages for tobacco sales, to enforce the law, and to show progressive reductions in the retail availability of tobacco products to minors. The implementation of the Synar Amendment, which initially was to go into effect during fiscal year 1994, was delayed because regulations about how states were to implement the statute had not yet been finalized. During the considerable lag between passage of the amendment and the issuance of final regulations, advocates for Synar-like restriction of youth smoking and those opposed to the Synar approach used the draft regulations to encourage states to adopt laws that in these parties' differing views were the minimum necessary for states to comply with the Synar Amendment (*Federal Register* 1993; DiFranza 1994c; DiFranza and Godshall 1994). These anticipatory responses, together with the opinions and concerns they elicited, were analyzed in a study conducted in 1995 by Downey and Gardiner (1996). An interim report from the OIG in 1995 indicated that states were finding the implementation process difficult. Although 85 percent of states performed some inspections, the majority did not use a rigorous sampling scheme. Fifty-six percent reported no statewide enforcement activity (OIG 1995).

The draft regulations were finalized in early 1996 after a review of comments from the health community, state agencies, and the tobacco industry. Responsibility for implementation was placed with the Substance Abuse and Mental Health Services Administration (SAMHSA), which in the course of 1996 conducted two technical assistance meetings with states and issued three separate guidance documents. Under these regulations, the Synar Amendment requires the 50 states, the District of Columbia, and U.S. jurisdictions to do the following:

- Have in effect a law prohibiting any manufacturer, retailer, or distributor of tobacco products from selling or distributing such products to any person under the age of 18.
- Enforce such laws in a manner that can be reasonably expected to reduce the extent to which tobacco products are available to persons under the age of 18.
- Conduct annual random, unannounced inspections to ensure compliance with the law; inspections are to be conducted to provide a valid sampling of outlets accessible to underaged youth.
- Develop a strategy and time frame for achieving an inspection failure rate of less than 20 percent among outlets accessible to underaged youth.
- Submit an annual report detailing the state's activities in enforcing the law, the success achieved, methods used, and plans for future enforcement.

In the event of noncompliance with these regulations, the Secretary of Health and Human Services is directed by statute (42 U.S.C. section 300X-26[c]) to make reductions of from 10 percent (for the first applicable fiscal year) to 40 percent (for the fourth

applicable fiscal year) in the noncompliant state's federal block grant for substance abuse programs. Although no additional monies have been appropriated to offset the costs of complying with these regulations, states may use block grant funds for certain Synar-related administrative activities, such as developing and maintaining a list of retail outlets, designing the sampling methodology, conducting Synar survey inspections, and analyzing the survey results.

In the several years following the issuance of the final Synar regulation, some significant advances have been made in enforcement of youth access laws. All states have laws prohibiting sale or distribution and they are enforcing those laws (USDHHS 1998a). Further, the median rate at which retailers failed to comply with laws prohibiting tobacco sales to minors in 1998 was 24.4 percent compared with the median rate of 40 percent in 1997 and pre-1997 studies that found violation rates ranging from 60 to 90 percent (USDHHS, in press). In the course of implementing Synar, every state has been required to establish a sampling methodology that measures the statewide retailer violation rate within a known confidence interval and to establish inspection protocols for conducting the statewide survey of tobacco retailers. These protocols include restrictions on the ages of minor inspectors and to establish procedures for recruiting and training of both minor inspectors and adult escorts. Additionally, the random, unannounced inspections conducted by the states in compliance with the Synar regulation provide the largest body of statewide data available on the level of retailer noncompliance.

Twenty-two states and two U.S. jurisdictions modified their youth access laws within a year of implementing Synar inspections. These changes improved the states' ability to enforce the law by clarifying responsibility for enforcement, defining violations, clarifying penalties, restricting vending machine sales, and establishing a list of tobacco vendors through retail licensure or vendor registration (USDHHS, in press).

In spite of these advances in enforcement of youth access laws, states also encountered difficulties while attempting to comply with the Synar mandate. The Synar regulation does not allow for the allocation of federal dollars (e.g., the Substance Abuse Prevention and Treatment Block Grant) to be used for enforcement. For many states, this proved to be a significant problem, because enforcement of youth access laws had not been previously viewed as a priority, and states were unwilling to redirect already limited funds for prevention and treatment services to law enforcement. Some states addressed the problem by earmarking revenue derived from fines, fees, or taxes. Other states implemented collaborative enforcement efforts among several agencies so that the financial burden would be shared. And still other states relied heavily on the use of volunteer youth inspectors and adult escorts (USDHHS 1998a). As the FDA became active in the youth access issue, a few states were able to use FDA funding for enforcement to cover some of the cost of Synar inspections in 1998.

Another obstacle to enforcement involved developing a valid random sample of tobacco outlets in the state when there was no accurate or current list of vendors available. Although a few states addressed this problem by working to pass retailer licensing laws at the state level, states initially had to build lists by relying on information from wholesale tobacco distributors and vending machine distributors and by searching existing lists that inadvertently identify tobacco vendors (e.g., convenience store association membership lists) (USDHHS 1999).

Other less frequently cited obstacles to enforcement included fear of lawsuits from cited vendors, concerns with the liability issues associated with working with youth, and opposition to conducting enforcement from state and local officials, law enforcement, and the general public in regions of the country where the economy is tied to the production of tobacco (USDHHS 1999).

In addition to federal and state efforts targeting illegal tobacco sales to minors, a great amount of local activity has occurred. Many local ordinances have resulted from the work of various groups, particularly in California, Massachusetts, and Minnesota (DiFranza 1994a,b; Kropp 1995; Forster et al. 1996, 1998). These ordinances—which may, for example, prohibit vending machine sales or all self-service sales of tobacco, require the tobacco sellers to be aged 18 years or older, require checking identification before sale, specify civil penalties for violators of the minimum-age law, require posting that law at the point of purchase, and require compliance checks with a specified timetable—permit creative responses at the local level to the minors' access problem. Compared with state officials, local officials deal with fewer retailers and a more limited set of constraints and are freer to tailor their policy to local conditions. Tobacco interests are less influential at the local level, because industry representatives are more likely to be perceived as outsiders, and their campaign contributions are less likely to be important to local officials; moreover, community members and local advocacy groups are often more effective against tobacco interests at this level than they are in statewide policy arenas (Sylvester 1989). Policy implementation

is also likely to be more consistent at the local level, because local advocates can monitor the process and because enforcement officials are more likely to have been a part of the policy's adoption. However, many of the policies at the federal, state, and local levels are interrelated: the federal Synar Amendment is implemented through state laws and has led to enforcement at the state and local level (USDHHS 1998a). The former FDA enforcement program operated through contracts with state agencies or organizations to conduct compliance checks in communities across the states. State agencies often fund local coalitions and projects, and local efforts influence and support efforts at the state level. For example, much of the local activity in California and Massachusetts would not have been possible without actions implemented at the state level, specifically designated funding.

Laws enacted by states pertaining to minors' access to tobacco as of December 31, 1999, have been compiled by the CDC (CDC, Office on Smoking and Health, State Tobacco Activities Tracking and Evaluation System, unpublished data)(Table 5.3). Dates of enactment or amendment indicate that some legislative change occurred in all but one state from January 1990 to December 1997 (National Cancer Institute, State Cancer Legislative Database, unpublished data, October 6, 1998).

Restrictions on Distribution of Samples

Tobacco product samples provide a low-cost or no-cost initiation to their use and thus encourage experimentation at early ages. Many states or other jurisdictions have laws that prohibit not only sales but also any samples distribution of tobacco to minors, whereas some laws specify exceptions permitting parents or guardians to provide tobacco to their children. All states have a specific restriction on the distribution of free samples to minors, and a few states or local jurisdictions prohibit free distribution altogether because of the difficulty of controlling who receives these samples. A ban on product sample distribution can extend to coupons for free tobacco products. In Minnesota, the attorney general levied a $95,000 civil penalty against the Brown & Williamson Tobacco Corporation for allowing such coupons to be redeemed in the state (Minnesota Attorney General 1994). The reports from both the IOM (Lynch and Bonnie 1994) and the Working Group of State Attorneys General (1994) recommended a ban on the distribution of free tobacco products. The final FDA rules issued in August 1996 would have prohibited the distribution of free samples (see "Further Regulatory Steps," earlier in this chapter). The proposed multistate settlement presumed congressional legislation that would uphold those rules (see "Legislative Developments" and "Master Settlement Agreement," earlier in this chapter).

Regulation of Means of Sale

How tobacco can be sold may also be regulated to make it more difficult for minors to purchase it. Historically, the first such restrictions adopted have been regulations of cigarette vending machines, which are an important source of cigarettes for younger smokers (Response Research, Incorporated 1989; Cummings et al. 1992, 1998; CDC 1996d). These regulations have taken the form of total bans, restrictions on placement (e.g., being within view of an employee instead of in coatrooms or entrances, or not being near candy or soda machines), restrictions on the types of businesses where vending machines may be located (e.g., limited to liquor-licensed businesses, private businesses, or businesses where minors are not permitted), and restrictions on characteristics of the machines themselves (e.g., requiring electronic locking devices or coin slugs purchased over a sales counter) (Forster et al. 1992a; DiFranza et al. 1996). The final FDA rules would have prohibited vending machines except in certain nightclubs and other adults-only facilities totally inaccessible to persons under age 18. The proposed multistate settlement anticipated legislation supporting this prohibition.

Forty-one states and the District of Columbia have laws that restrict minors' access to vending machines, including two states, Idaho and Vermont, that have enacted legislation totally banning vending machines. However, many of the state vending machine laws are weak. For example, 21 states and the District of Columbia do not restrict placement if the machine is supervised, and New Jersey bans vending machines in schools only (CDC, Office on Smoking and Health, unpublished data, 2000). However, more than 290 local jurisdictions, including New York City, have been able to adopt and enforce outright bans on cigarette vending machines or to severely restrict them to locations, such as taverns, where minors are often excluded (American Nonsmokers' Rights Foundation, unpublished data, 2000).

Representatives of tobacco manufacturers and retailers have strongly opposed bans on cigarette vending machines and have argued instead for weaker restrictions, if any, especially for what they term "adult" locations (Minnesota Automatic Merchandising Council 1987; Adkins 1989; Parsons 1989; Grow 1990; Moylan 1990; Pace 1990; Gitlin 1991). Many of these locations, including bars and other liquor-licensed

Table 5.3. Provisions of state laws relating to minors' access to tobacco as of December 31, 1999

State	Minimum age for tobacco sales	Tobacco license required	Vending machine restrictions	Enforcement authority	Sign-posting requirements*	Prohibits purchase, possession, and/or use by minors
Alabama	19	yes	no	yes	no	yes
Alaska	19	yes†	yes	no	yes	yes‡
Arizona	18	no	yes	no	no	yes
Arkansas	18	yes	yes	yes	yes	yes
California§	18	no	yes	no	yes	yes
Colorado	18	no	yes	yes	yes	yes
Connecticut§	18	yes†	yes	yes	yes	yes
Delaware§	18	yes	yes	yes	yes	yes
District of Columbia	18	yes†	yes	no	yes	no
Florida§	18	yes	yes	yes	yes	yes
Georgia	18	yes	yes	yes	yes	yes
Hawaii	18	no	yes	no	yes	yes
Idaho	18	no	yes^	yes	no	yes
Illinois§	18	no	yes	yes	no¶	yes
Indiana§	18	no	yes	yes	yes	yes
Iowa§	18	yes†	yes^	yes	no	yes
Kansas	18	yes†	yes	no	yes	yes
Kentucky§	18	yes†	yes	yes	yes	yes
Louisiana§	18	yes	yes	yes	yes	yes**
Maine	18	yes	yes	yes	yes	yes
Maryland	18	yes†	no	no	no	yes
Massachusetts§	18	yes	no	no	yes	no
Michigan§	18	yes	yes	no	yes	yes††
Minnesota	18	yes	yes	yes	no	yes
Mississippi§	18	yes	yes	yes	yes	yes§§

*Refers to the requirement to post the minimum age for purchase of tobacco products.
†Excludes chewing tobacco or snuff.
‡Except minors at adult correctional facilities.
§Some or all tobacco control legislation includes preemption.
^Requires businesses that have vending machines to ensure that minors do not have access to the machines; however, the law does not specify the type of restriction, such as limited placement, locking device, or supervision.
¶Signage required for sale of tobacco accessories, but not for tobacco.
**Except persons who are accompanied by a parent, spouse, or legal guardian 21 years of age or older or in a private residence.
††A pupil may not possess tobacco on school property.
Source: Centers for Disease Control and Prevention, Office on Smoking and Health, State Tobacco Activities Tracking and Evaluation System, unpublished data.

Table 5.3. Continued

State	Minimum age for tobacco sales	Tobacco license required	Vending machine restrictions	Enforcement authority	Sign-posting requirements	Prohibits purchase, possession, and/or use by minors
Missouri	18	no	no	no	yes	no
Montana[§]	18	yes	yes	yes	yes	yes[‡‡]
Nebraska	18	yes[§§]	yes	no	no	yes
Nevada[§]	18	yes[§§]	yes	yes	no	no
New Hampshire	18	yes	yes	yes	yes	yes
New Jersey[§]	18	yes[†]	yes	yes	yes	no
New Mexico[§]	18	no	yes	yes	yes	yes
New York[§]	18	yes	yes	yes	yes	no
North Carolina[§]	18	no[†§§^^]	yes	no	yes	yes
North Dakota	18	yes[§§]	yes	no	no	yes
Ohio	18	yes[+]	yes	no	yes	no
Oklahoma[§]	18	yes[†]	yes	yes	yes	yes
Oregon[§]	18	no	yes	yes	yes	yes
Pennsylvania[§]	18	yes[+]	no	no	no	no[‡‡]
Rhode Island	18	yes[+]	yes	yes	yes	yes[¶¶]
South Carolina[§]	18	yes	no	no	no	no
South Dakota[§]	18	no	yes	yes	no	yes
Tennessee[§]	18	no	yes	yes	yes	yes
Texas	18	yes	yes	yes	yes	yes
Utah[§]	18	yes	yes	yes	no	yes
Vermont	18	yes	yes	yes	yes	yes
Virginia[§]	18	no	yes	yes	yes	yes
Washington[§]	18	yes[†]	yes	yes	yes	yes
West Virginia[§]	18	no	no	yes	no	yes
Wisconsin[§]	18	yes	yes	no	yes	yes
Wyoming[§]	18	no	yes	no	yes	yes
Total	51	35	44	33	36	42

[‡‡]A pupil may not possess or use tobacco on school property.
[§§]Except vending machines.
[^^]A retail license exists for those retailers who manufacture their own tobacco products or deal in nonpaid tobacco products.
[¶¶]On any public street, place, or resort.

businesses, do not prohibit minors' entry and have been shown to be readily accessible to underaged buyers (Forster et al. 1992b; Wakefield et al. 1992a; Cismoski and Sheridan 1993). Because less-restrictive measures must be consistently implemented to be effective, and because such implementation is difficult, the USDHHS (1994) and the IOM (Lynch and Bonnie 1994) recommend a total ban on cigarette vending machines. The 1996 FDA rules would have excluded locations that are inaccessible to minors, but the multistate settlement proposed a total ban.

Restrictions on vending machines are a category of regulation of self-service cigarette sales. A general ban on self-service would require that tobacco be physically obtained from a salesperson and be stored so that products are not directly accessible to customers. In one study of 489 over-the-counter purchase attempts, minors were successful at purchasing in 33 percent of locations where cigarettes were behind the counter and 45 percent of locations where cigarettes were openly available (Forster et al. 1995). In another study, stores that did not give customers access to tobacco products were less likely to sell to minors (12.8 percent) than stores that permitted direct contact with tobacco products (30.6 percent)(Wildey et al. 1995a). Finally, data suggest that shoplifting is an important commercial source of tobacco to underaged youth (Cummings et al. 1992, 1995; Cismoski and Sheridan 1994; Lynch and Bonnie 1994; Forster et al. 1995; Wildey et al. 1995b; CDC 1996d; Roswell Park Cancer Institute 1997). Shoplifting may be deterred by regulations that specify that until the moment of purchase, single packs, any amount less than a carton, or all tobacco products must be physically handled by an employee only (Cismoski 1994; Wildey et al. 1995a; Caldwell et al. 1996).

Several states have addressed the issue of self-service sales of tobacco products. For example, Idaho and Minnesota restrict self-service sales to only those stores that do not allow minors to enter and that obtain most of their sales from tobacco. Texas prohibits self-service sales in any location accessible to minors. Three hundred and ten localities have chosen to restrict tobacco sales by prohibiting self-service displays (American Nonsmokers' Rights Foundation, unpublished data, 2000). Opposition to this measure is generally organized by tobacco distributors and retailers, who fear the loss of slotting fees—payments (often substantial) to retailers for advantageous placement of tobacco products and for point-of-purchase advertising in their business (Gersten 1994; Thomas A. Briant, letter to Litchfield Tobacco Retailers, February 16, 1995; Caldwell et al. 1996). The IOM recommends a ban on self-service displays (Lynch and Bonnie 1994), and the Working Group of State Attorneys General (1994) recommends to tobacco retailers that they eliminate such displays. That this recommendation is not unreasonably burdensome has been demonstrated by one study in which 28 percent of retailers in 14 communities complied voluntarily (Forster et al. 1995) and by another study involving 15 cities in northern California (Kropp 1995). The 1996 FDA rules would also have prohibited self-service displays except in certain adults-only facilities; the proposed national settlement further stipulated that in non-adults-only facilities, tobacco products must be out of reach or otherwise inaccessible or invisible to consumers.

Anecdotal reports have suggested that single or loose cigarettes are sold in some locations. Such sales are often prohibited by state or local law, at least implicitly because single cigarettes do not display the required state tax stamp or federal warning. Frequently, single cigarettes are kept out of sight and are available only by request. Researchers in California found that even after a state law explicitly banned the sale of single cigarettes, almost one-half of tobacco retailers sold them to their customers (Klonoff et al. 1994). The study found that the stores that made loose cigarettes available sold them to almost twice as many minors as they did to adults. That finding lends support to the argument that single cigarette sales are an important avenue to addiction for some youth. A recent study in Central Harlem has produced similar results: 70 percent of the licensed outlets sold single cigarettes to minors (Gemson et al. 1998). The IOM, the 1996 FDA rules, and the proposed multistate settlement have all recommended that the sale of loose or single cigarettes be explicitly prohibited (Lynch and Bonnie 1994).

Regulation Directed at the Seller

All states now have a law specifying the minimum purchaser's age for legal sale of tobacco products. For all but two states, that age is 18; Alabama and Alaska specify age 19. Almost two-thirds of the states and many local jurisdictions require tobacco retailers to display signs that state the minimum age for sale. Some regulations specify the size, wording, and location of these signs. Other regulations specify the minimum age for salespersons; these regulations recognize the difficulty young sellers may experience in refusing to sell cigarettes to their peers.

Most of these laws define violation either as a criminal offense (e.g., misdemeanor or gross

misdemeanor), with accompanying penalties, or as a civil offense, with specified civil penalties (e.g., fines and license suspension). Civil offense laws are thought to make enforcement easier and are therefore more likely to be carried out, since they do not generally require court appearances. Many state or local laws specify penalties only against the salesperson. Applying penalties to business owners, who generally set hiring, training, supervising, and selling policies, is considered essential to preventing the sale of tobacco to minors, although tobacco retailers have vigorously opposed these measures (Skretny et al. 1990; Feighery et al. 1991; McGrath 1995a,b).

More than one-half of the states and some local jurisdictions require that tobacco retailers obtain licenses for over-the-counter sales, but smokeless tobacco is exempted by 13 of these states (CDC, Office on Smoking and Health, unpublished data). Licensure sometimes is simply a mechanism for collecting taxes or generating revenue; in other states and cities, conditions are attached that relate to minors' access. In addition to civil penalties, retail licensure for tobacco represents another approach for facilitating youth access law enforcement efforts and strengthening sanctions for violators of the law. Retail licensure can facilitate the identification of retailers. The lack of a current and accurate list of tobacco vendors has been cited by many states involved in Synar enforcement as a serious impediment to efficient enforcement (USDHHS 1999). Retail licensure can also create an incentive for retail compliance. License suspensions or revocations could be imposed as penalties for violation of youth access laws, resulting in revenue loss for retailers. Licensure would also provide a source of funds to pay for enforcement and retailer education when licensing fees or fines for violations are earmarked for such education purposes. Finally, retail licensure provides a mechanism for administrative adjudication of youth access law violations. License holders who fail to comply with the law could be held accountable before the licensing authority.

No published empirical research examines the effects of tobacco retail licensure on either enforcement efforts or retail compliance. Studies on policies targeted to increase retail compliance, however, suggest several specific elements of licensure policies that should be present in order to increase the likelihood of positive effects. The points below outline the ways in which licensure policies could be used to enhance retail compliance efforts.

- Licensure laws must explicitly link the privilege of selling tobacco products to retail compliance with youth access laws (Levinson 1999).
- Licensure should cover both retail stores and vending machines (Levinson 1999).
- License holders should be required to renew their license annually (Levinson 1999; USDHHS 1999).
- License holders should be fined for violation of youth access laws (Levinson 1999).
- Fines should be high enough to encourage vendors to comply with youth access laws but not so high as to risk loss of community or judicial support for the imposition of penalties (Lynch and Bonnie 1994).
- Fines should be graduated so that greater consequences are associated with increased number of violations. Repeated violations should lead to license suspension or revocation (CDC 1995a; NCI n.d.).
- License fees should be sufficient to cover the average cost of compliance checks (CDC 1995a).
- The revenue from fines should subsidize the costs of enforcement (Working Group of State Attorneys General 1994).

In addition to these items, several other policy elements have been suggested for incorporation into licensure laws. These licensure policy components should communicate clear and consistent messages about the illegality of tobacco sales to minors and should promote societal norms intolerant of youth access law violations (Kropp 1996). These elements include mandatory posting of warning signs within clear sight of consumers, mandatory checking of age identification, state provision of merchant and clerk education about youth access law requirements (i.e., consequences for violations and techniques for improving merchants' and clerks' skills at detecting underage youth and refusing sales), restrictions or bans on self-service displays, and ensuring that clerks are at or above the legal purchase age.

Without enforcement provisions, however, licensing laws are not effective measures to restrict minors' access. Before 1996, only 16 states with licensing laws specified the agency with enforcement responsibility, despite recommendations (USDHHS 1990; Lynch and Bonnie 1994; Working Group of State Attorneys General 1994) that states adopt a licensing requirement that has civil penalties and a designated

enforcement agent. In its 1998 report, SAMHSA indicates that all but one state requiring licenses have a designated enforcement agency (USDHHS 1998a; see "Enforcement of Laws on Minimum Ages for Tobacco Sales," later in this chapter).

State laws and local ordinances can be a mechanism for increasing retailer awareness of youth access laws and retailer ability to comply with the law. Often referred to as responsible vendor laws, this type of legislation can require retailer education and training as a condition of retail tobacco licensure or simply require education and training for all tobacco vendors. Numerous studies have shown the potential benefit of comprehensive merchant education and training programs in helping to reduce illegal sales to minors (Altman et al. 1989, 1991, 1999; Feighery 1991; Keay 1993; Cummings et al. 1998). In many instances, representatives of tobacco retailers have supported the passage of responsible vendor laws (McGrath 1995a,b; Thomas A. Briant, Letter to Litchfield Tobacco Retailers, February 16, 1995) when these laws also exempt business owners from penalties or specify lower penalties for tobacco sales to minors if owners have trained their employees. Under such conditions, employee training would relieve retailers of responsibility for ongoing supervision and monitoring of employee behavior and likely result in decreasing the impact of youth access laws. It should be noted, however, that as a result of both Synar and FDA attention to the problem of youth access to tobacco, several states have worked to ensure the modification of youth access and/or retail licensure laws to mandate vendor education and training without the incorporation of clauses relieving retailer responsibility (USDHHS 1998a). These efforts recognize that responsible vendor laws have the potential to be an effective way to increase the ability of retailers and clerks to comply with the law by accurately detecting underage purchases and confidently and safely refusing sales.

The general availability of tobacco products in retail outlets that have pharmacies has led to some concerns. In the United States, stores that have pharmacies usually sell tobacco products, contrary to a 1971 policy recommendation of the American Pharmaceutical Association (1971) that cited the inconsistency of selling cigarettes with their function as health institutions. A few small chains and a growing number of independent stores with pharmacies are tobacco free, but all large chains and most independent stores sell tobacco products. Pharmacies (and stores that have pharmacies) that sell tobacco products are as likely as other outlets to sell to minors (Brown and DiFranza 1992). On the other hand, a study has shown that pharmacists who work in stores that do not sell tobacco have a better understanding of the dangers of tobacco than do pharmacists who work in stores that sell tobacco, and they also feel more confident that they can help customers who use tobacco stop (Davidson et al. 1988). Two-thirds of pharmacists surveyed in Minnesota believed that members of the profession should not work in stores that sell tobacco products (Martinez et al. 1993), and many felt that the contiguity of tobacco products and pharmaceuticals produces professional dissonance (Taylor 1992; Kamin 1994). Both the Canadian Medical Association and the American Medical Association are opposed to tobacco sales in pharmacies and in stores that have pharmacies (Staver 1987; Sullivan 1989). The Canadian provincial government of Ontario banned such sales in 1994 (An Act to Prevent the Provision of Tobacco to Young Persons and to Regulate its Sale and Use by Others, Statutes of Orleans, ch. 10, sec. 3[6] [1994] [Can.]).

Regulation Directed at the Buyer

State and local jurisdictions are increasingly imposing sanctions against minors who purchase, attempt to purchase, or possess tobacco products (CDC 1996c; Forster et al. 1996). These laws are favored by some law enforcement officials and tobacco retailers because of the potential deterrent value (Parsons 1989; Talbot 1992). Some advocates for reducing tobacco use argue, however, that such laws are part of an effort to deflect responsibility for illegal tobacco sales from retailers to underaged youth; that these laws are not an efficient substitute for laws regulating merchants, because so many more minors than retailers are involved; and that sanctions against minors are more difficult to enforce than those against retailers (Carol 1992; Cismoski 1994; Lynch and Bonnie 1994; Mosher 1995; Wolfson and Hourigan 1997). Other advocates have insisted that some of the responsibility must devolve on the purchaser and that laws prohibiting possession should be vigorously enforced (Talbot 1992). Although not taking a stand on the advisability of purchase and possession laws, the Working Group of State Attorneys General (1994) recommended that such laws should be considered only after effective retail regulations are already in place.

Enforcement of Laws on Minimum Ages for Tobacco Sales

Although laws on the minimum age for tobacco sales have been part of many state statutes for decades, only in the past few years has attention been focused

on enforcing these laws by federal, state, or local agencies (Lynch and Bonnie 1994; *Federal Register* 1996; USDHHS, in press). As more information has become available about the implementation and effects of various minors' access laws, it is becoming clear that organized enforcement efforts are essential to realizing the potential of these laws. Enforcement of minimum-age laws is more likely to occur when enforcement is self-supporting through license fees and revenues from penalties and when the penalty schedule includes civil penalties that are large enough to be effective but are seen as reasonable and simple to administer (Working Group of State Attorneys General 1994). Law enforcement officials have sometimes balked at applying criminal penalties against clerks and retailers for selling tobacco to minors. Enforcement may be more effective if sanctions can be imposed on managers or business owners rather than, or in addition to, salespersons (Working Group of State Attorneys General 1994).

Moreover, the 1992 enactment of the Synar Amendment (Public Law 102-321, sec. 1926, discussed in the introduction to this section) has forcibly brought this issue to the fore, because the amendment requires states to enact and enforce legislation restricting the sale and distribution of tobacco products to minors. As a result, all states have laws prohibiting the sale and distribution of tobacco to minors and all states enforce these laws through a statewide coordinated program. Additionally, all states have now designated a lead agency and all but one have an agency responsible for enforcing their minimum-age law (Table 5.4) (USDHHS, in press). In addition to federal and state enforcement efforts, a number of local jurisdictions around the country have begun actively enforcing the law against tobacco sales to minors, and local ordinances can include a schedule of required compliance checks (Lynch and Bonnie 1994; Working Group of State Attorneys General 1994; Forster et al. 1996; DiFranza et al. 1998).

Compliance checks are most often carried out by having an underaged buyer, under the supervision of a law enforcement officer, licensing official, or some other designated adult, attempt to purchase tobacco. In jurisdictions where the minor is held legally at fault if a purchase is made (and where no exceptions are made for compliance checks), minors participating in compliance checks are sometimes instructed not to complete the purchase even if the salesperson is willing; in these cases, the retailer is considered to be in noncompliance with the youth access law if the purchase is entered into the cash register (Hoppock and Houston 1990; Cummings et al. 1996).

Several innovative civil enforcement approaches have been attempted in California. The district attorneys in Sonoma and Napa Counties have used the California Business and Professions Code section 17200 to file civil lawsuits against store owners whose outlets repeatedly sold tobacco to minors. Civil enforcement has proved to be more efficient than criminal citations and has resulted in fines and penalties as well as reductions in tobacco sales to minors (Kropp and Kuh 1994).

Increased emphasis on enforcement, coupled with passage of laws against possession of tobacco by minors, may result in enforcement resources being selectively funneled to apprehending underaged smokers rather than penalizing the merchants who sell tobacco to these minors. A survey of 222 police chiefs in Minnesota revealed that although more than 90 percent were enforcing the law against minors' possession, 40 percent reported applying penalties to minors, and only 6 percent reported any enforcement against merchants (Forster et al. 1996).

A vigorous and multidimensional campaign has been mounted by the tobacco industry and its allies to prevent or undermine effective enforcement of minors' access laws and to resist the proposal that retailers be held accountable for their stores' compliance. Since 1992, laws sponsored by the tobacco industry but ostensibly intended to bring states into compliance with requirements of the Synar Amendment have been passed in Georgia, Idaho, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Dakota, and Tennessee (DiFranza 1994c; DiFranza and Godshall 1994). Tobacco industry representatives and their allies have lobbied successfully for the inclusion of language such as "knowingly" or "intentionally" in the law prohibiting sale of tobacco to minors; the impact of such language may be to render the law unenforceable. Industry interests have sought to include various restrictions on how, how often, and by whom enforcement or compliance testing can be conducted. Examples of these restrictions include opposing employing teens in compliance testing or requiring that only very young teens can function as buyers, insisting that enforcement be done only by the alcohol control authority or some other state agency, opposing compliance checks carried out by advocacy groups or for public health research, and opposing requirements that compliance checks occur on a specified schedule. The industry has further proposed immediate reentry and confrontation after an illicit sale—a procedure that could compromise collecting evidence. Industry representatives have also consistently maintained that merchants ought not to be responsible for the costs incurred in complying with minimum-age

Table 5.4. Agencies responsible for enforcing state laws on minimum age for tobacco sales as of fiscal year 1998

State/Territory	Lead agency	Enforcement agency
Alabama	Alcoholic Beverage Control Board	Alcoholic Beverage Control Board
Alaska	Department of Health and Social Services, Division of Alcoholism and Drug Abuse	Attorney General's Office
Arizona	Department of Health Services, Office of Substance Abuse and General Mental Health	Department of Health Services, Office of Substance Abuse and General Mental Health
Arkansas	Department of Health, Bureau of Alcohol and Drug Abuse Prevention	Tobacco Control Board
California	Department of Health Services	Department of Health Services
Colorado	Department of Human Services, Alcohol and Drug Abuse Division	State and local law enforcement
Connecticut	Department of Mental Health and Social Services, Office of Addiction Services	Department of Revenue Services
Delaware	Department of Public Safety, Alcoholic Beverage Control Commission	Department of Public Safety, Alcoholic Beverage Control Commission
District of Columbia	Department of Human Services, Addiction Prevention and Recovery Administration	Department of Consumer and Regulatory Affairs and the Metropolitan Police Department
Florida	Department of Business and Professional Regulation, Division of Alcoholic Beverages and Tobacco	Department of Business and Professional Regulation, Division of Alcoholic Beverages and Tobacco
Georgia	Department of Public Safety	Department of Public Safety
Hawaii	Department of Health, Alcohol and Drug Abuse Division	Department of Health with Department of the Attorney General
Idaho	Department of Health and Welfare, FACS Division, Bureau of Mental Health and Substance Services	Department of Health and Welfare, FACS Division, Bureau of Mental Health and Substance Services
Illinois	Liquor Control Commission	No one agency responsible for enforcement
Indiana	Family and Social Services Administration, Division of Mental Health	Indiana Alcoholic Beverage Commission Excise Police
Iowa	Department of Public Health, Division of Substance Abuse and Health Promotion	Department of Public Health, Division of Substance Abuse and Health Promotion
Kansas	Department of Social and Rehabilitation Services, Alcohol and Drug Abuse Services	Department of Revenue, Alcoholic Beverage Control Board
Kentucky	Department of Alcoholic Beverage Control	Department of Agriculture (specified state law) with the Department of Alcoholic Beverage Control (appointed)

Source: U.S. Department of Health and Human Services, in press.

Table 5.4. Continued

State/Territory	Lead agency	Enforcement agency
Louisiana	Department of Revenue and Taxation, Office of Alcoholic Beverage and Tobacco Control	Department of Revenue and Taxation, Office of Alcoholic Beverage and Tobacco Control
Maine	Department of Mental Health and Mental Retardation, Office of Substance Abuse	Department of Mental Health and Mental Retardation, Office of Substance Abuse
Maryland	Department of Health and Mental Hygiene, Alcohol and Drug Abuse Administration	State Comptroller's Office
Massachusetts	Department of Public Health, Bureau of Substance Abuse Services	Department of Public Health, Tobacco Control Program with the Attorney General's Office
Michigan	Department of Community Health, Bureau of Substance Abuse Services	Department of Community Health, Bureau of Substance Abuse Services
Minnesota	Department of Human Services, Chemical Dependency Program Division	Department of Human Services, Chemical Dependency Program Division
Mississippi	Department of Mental Health, Division of Alcohol and Drug Abuse	Office of Attorney General
Missouri	Department of Mental Health, Division of Alcohol and Drug Abuse	Department of Mental Health, Division of Alcohol and Drug Abuse
Montana	Department of Public Health and Human Services, Division of Addictive and Mental Disorders	Department of Public Health and Human Services, Division of Addictive and Mental Disorders
Nebraska	Department of Health and Human Services	Nebraska State Patrol
Nevada	Attorney General of the State of Nevada	State Attorney General
New Hampshire	Department of Health and Human Services, Bureau of Substance Abuse Services	Department of Health and Human Services, Bureau of Substance Abuse Services
New Jersey	Department of Health and Senior Services	Department of Health and Senior Services with local health agencies
New Mexico	Department of Regulation and Licensing, Alcohol and Gaming Division	Department of Regulation and Licensing, Alcohol and Gaming Division (statutory), Department of Health and Department of Public Safety (by executive order)
New York	Department of Health, Office of Alcoholism and Substance Abuse Services	37 local county health units and 10 district offices of the state's Department of Health
North Carolina	Department of Human Resources, Division of Mental Health, Developmental Disabilities and Substance Abuse Services	Local police and sheriff's departments
North Dakota	Department of Human Services, Division of Mental Health and Substance Abuse Services	State and local law enforcement agencies are responsible for enforcing state and local laws prohibiting tobacco sales to minors. The Department of Human Services, Division of Mental Health and Substance Abuse Services, is responsible for conducting compliance surveys.

Table 5.4. Continued

State/Territory	Lead agency	Enforcement agency
Ohio	Department of Alcohol and Drug Addiction Services	Department of Alcohol and Drug Addiction Services
Oklahoma	Alcoholic Beverage Law Enforcement Commission	Alcoholic Beverage Law Enforcement Commission
Oregon	Department of Human Resources, Office of Alcohol and Drug Abuse Programs	Oregon State Police
Pennsylvania	Department of Health, Office of Alcohol and Drug Abuse Programs	Department of Health, Office of Alcohol and Drug Abuse Programs
Rhode Island	Department of Health, Division of Substance Abuse	Department of Health, Division of Substance Abuse (The Division of Substance Abuse transferred from the Rhode Island Department of Health to the Department of Mental Health, Retardation, and Hospitals on September 1, 1998.)
South Carolina	Department of Alcohol and Other Drug Abuse Services	Department of Revenue and Taxation
South Dakota	Department of Human Services, Division of Alcohol and Drug Abuse	Division of Alcohol and Drug Abuse coordinates enforcement with the Attorney General's Office and 66 county state's attorneys
Tennessee	Department of Agriculture	Department of Agriculture
Texas	Commission on Alcohol and Drug Abuse and Department of Health	State Comptroller
Utah	Department of Human Services, Division of Substance Abuse	Department of Human Services, Division of Substance Abuse
Vermont	Department of Liquor Control	Enforcement and Licensing Division of the Department of Liquor Control
Virginia	Department of Agriculture and Consumer Services	Alcohol Beverage Control Board
Washington	Department of Social and Health Services, Division of Alcohol and Substance Abuse	Liquor Control Board
West Virginia	Department of Health and Human Resources, Division of Alcoholism and Drug Abuse	Alcohol Beverage Administration
Wisconsin	Department of Health and Family Services, Bureau of Substance Abuse Services	Department of Health and Family Services, Bureau of Substance Abuse Services
Wyoming	Department of Health, Division of Behavioral Health and Substance Abuse Program	Local law enforcement agencies
American Samoa	Department of Human and Social Services, Social Services Division	Department of Public Health
Guam	Department of Mental Health and Substance Abuse	Department of Mental Health and Substance Abuse
Marshall Islands	Office of the Attorney General	Chief Prosecutor of the Office of the Police Commissioner

Table 5.4. Continued

State/Territory	Lead agency	Enforcement agency
Micronesia	Department of Health	No single agency; enforcement by local police and health departments
Northern Marianas	Department of Public Health	Department of Public Health
Palau	Ministry of Justice, Bureau of Public Safety with Ministry of Commerce and Trade (responsible for licensing)	Bureau of Public Safety
Puerto Rico	Department of Health, Mental Health and Anti-Addiction Services Administration	Department of Treasury
Virgin Islands	Department of Health, Division of Mental Health, Alcoholism and Drug Dependency Services	Department of Licensing and Consumer Affairs

laws, such as the costs of making tobacco inaccessible to minors or of having merchants monitor their own staff (DiFranza 1994c; DiFranza and Godshall 1994). Despite, or in some cases in response to, these industry efforts, many states have successfully strengthened their youth access laws and/or removed industry-inspired loopholes and provisions for affirmative defense. Six states amended state law to permit minors to participate in compliance checks conducted for enforcement purposes. Twenty-three states now have this provision in their minors' access law. Two states passed legislation that will provide a more accurate list of tobacco retailers for compliance checks and three states added provisions that address funding for enforcement and education programs (USDHHS, in press).

The reports from both the IOM (Lynch and Bonnie 1994) and the Working Group of State Attorneys General (1994) include strong recommendations that active enforcement of minors' access laws be implemented, that merchants be held responsible for sales in their stores, and that access laws supported by the tobacco industry be rejected.

Using another type of enforcement, some private groups and states have conducted lawsuits against commercial outlets that violate minors' access laws. A selection of these cases, one of which also named a tobacco company as a codefendant, is discussed in "Enhancing Prohibitory Regulation by Private Litigation," later in this chapter.

Traditional law enforcement agencies often resist conducting tobacco enforcement for a number of reasons. They believe that tobacco enforcement diverts limited resources from other more pressing crime and that the public does not support the use of officers for such enforcement. They have also argued that the ill-feeling of members of the business community generated by the issuance of citations negatively affects other enforcement efforts. Finally, the officers themselves frequently resist because they do not want to facilitate potential job loss for a clerk for what they perceive to be a "minor" infraction or because they believe that prosecutors and judges will be reluctant to penalize (USDHHS 1999).

Other agencies can be a suitable alternative for the conduct of enforcement. Chief among them are public health departments, which recognize the importance of conducting enforcement, and alcohol beverage control agencies (ABCs), which are highly experienced in conducting undercover compliance checks. ABCs retain a staff of inspectors that are familiar with the protocols that may be employed during retail inspections (i.e., consummated and unconsummated buys). ABCs also tend to recognize a connection between alcohol and tobacco enforcement and accept the importance of conducting tobacco inspection for practical reasons if not for health reasons. This, in turn, results in less of a philosophical resistance to actually issuing citations for violations. Finally, because ABC authorities regularly engage in enforcement directed at retailers, tobacco enforcement conducted by this agency will not likely generate as negative a backlash from retailers and the general public as enforcement conducted by traditional law enforcement (USDHHS 1999).

State Settlements

All four states that settled their lawsuits against the tobacco industry in 1997–1998 won youth access restrictions in their settlement agreements. (The events leading up to these four settlements, along with their implications as a litigational tool for reducing tobacco use nationwide, are discussed in "Recovery Claims by Third-Party Health Care Payers," later in this chapter.) For example, the tobacco industry defendants in the state of Florida case agreed to support new state laws or regulations to prohibit the sale of cigarettes in vending machines, except in adult-only locations or facilities (*Florida v. American Tobacco Co.*, Civil Action No. 95-1466 AH, sec. II.A.2 [Fla., Palm Beach Cty. Aug. 25, 1997]). The industry also agreed to support new state laws in Florida to increase civil penalties for sales of tobacco products to minors (including retail license suspension or revocation) and to strengthen civil penalties for the possession of tobacco by minors. The Florida settlement (sec. II.B) further requires the tobacco industry to pay $200 million for a two-year pilot program to reduce tobacco use by minors, including enforcement, media, educational, and other youth-directed programs. Youth access provisions of the Texas settlement that pertain to new state laws mirror the terms of the Florida agreement (*Texas v. American Tobacco Co.*, No. 5-96CV-91 [E.D. Tex. Jan. 16, 1998], secs. 7[a–c]).

The state of Minnesota won the most comprehensive array of public health and youth access restrictions to date when it settled its case after a highly publicized trial in 1998 (*Minnesota v. Philip Morris Inc., cited in* 13.2 TPLR 3.39). One provision of the Minnesota settlement forbids tobacco manufacturers from directly or indirectly opposing state statutes or regulations intended to reduce tobacco use by minors. A list of legislative proposals covered by the prohibition is attached to the settlement agreement (Schedule B) and includes the following measures:

- Expansion of self-service restrictions and removal of the current exception for cigars.
- Amendment of the current law for restricting youth access to vending machines to clarify that machines with automatic locks and machines that use tokens are covered.
- "Enhanced or coordinated funding" for enforcement efforts under sales-to-minors provisions of the criminal code or the statute and ordinances involving youth access.
- Laws to "encourage or support the use of technology to increase the effectiveness of age-of-purchase laws" (e.g., programmable scanners or scanners to read drivers' licenses).
- Restrictions on wearing, carrying, or displaying tobacco indicia in school-related settings.
- Establishment or enhancement of nonmonetary incentives for youth not to smoke (e.g., expand community services programs for youth).

Moreover, prohibiting tobacco companies from challenging the enforceability or constitutionality of current Minnesota laws encompasses some key youth access statutes, such as those pertaining to the sale of tobacco to minors (Minnesota Statutes sec. 609.685) and the distribution of samples (Minnesota Statutes sec. 325.77) (*Minnesota v. Philip Morris Inc., cited in* 13.2 TPLR 3.39, sec. IV.A.2). Another injunctive provision, forbidding the tobacco industry from targeting children through advertising, promotion, or marketing, also prohibits the industry from "taking any action the primary purpose of which is to initiate, maintain or increase the incidence of underage smoking in Minnesota" (*Minnesota v. Philip Morris Inc.*, No. C1-94-8565 [Minn., Ramsey Cty. May 8, 1998], *cited in* 13.2 TPLR 2.112, 2.113 [1998]).

The Minnesota settlement also includes a large industry-funded program to reduce teen smoking. The program includes counteradvertising, classroom education, community partnerships, research, advocacy, and prevention components (*Minnesota v. Philip Morris Inc., cited in* 13.2 TPLR 3.39, sec. VIII.A.2).

Although Mississippi (the first state to settle) did not initially secure public health restrictions, it later imported some of those contained in the sweeping Minnesota settlement by exercising the "most favored nation" clause (discussed in "Recovery Claims by Third-Party Health Care Payers," later in this chapter) in its original settlement agreement (PR Newswire 1998a). Intended to ensure that Mississippi would receive the benefits any later similar settlement might receive, the most favored nation clause also enabled the state to substantially increase the dollar amount of its settlement with the industry. Furthermore, although the revised agreement prohibits Mississippi from gaining any additional monetary benefit based on future state settlements, it does not limit the incorporation of additional public health provisions or financial adjustments in the event that Congress adopts national tobacco legislation.

Preemption of Local Action by State Policy

As noted earlier in this section (see "Efforts to Promote Adoption and Enforcement of Minors' Access Laws"), the initiative to address minors' access, as well as many creative solutions, has come from the local level. In state legislatures, the balance of power between forces for and against reducing tobacco use is most often tipped in favor of tobacco use. The reverse is often true at the local level, where jurisdictions have enacted innovative approaches that have been evaluated by researchers. At the state level, however, tobacco industry representatives have sought to preclude legislative or enforcement authority at the local level by including preemption language, usually attached to weak statewide restrictions.

As of 1998, 30 states had preemptive tobacco control laws, although they vary widely in the kind of restrictions they preempt (CDC 1999). No preemptive tobacco control laws have been enacted since July 1996. The tobacco industry has adopted preemption as a main strategy to undermine, overturn, and prohibit future efforts to adopt local policies to reduce tobacco use (Siegel et al. 1997; Gorovitz et al. 1998). For instance, in 1991 and 1992, the tobacco industry spent more than $2 million to lobby for the repeal of local clean indoor air ordinances (Traynor et al. 1993). In California in one year alone, the industry spent $18.9 million on an initiative to repeal all local ordinances for reducing tobacco use and to eliminate local authority to enact new ordinances (Siegel et al. 1997).

A memorandum of the 1991 Smokeless Tobacco Council described a strategy to oppose local ordinances and advance statewide antitobacco bills containing preemption clauses (Siegel et al. 1997). In addition, the Tobacco Institute stated that a priority for 1993 was to "encourage and support statewide legislation preempting local laws, including smoking, advertising, sales, and vending restrictions" (Tobacco Institute 1992). This strategy would work against the passage of strong tobacco control laws at the local level and would relieve logistical difficulties of the tobacco industry in devoting resources toward multiple local jurisdictions (Siegel et al. 1997; Gorovitz et al. 1998).

Even when a preemption clause is not specifically included, tobacco industry representatives have argued that state laws that address minors' access are intended to preempt local action, and that argument has been used by at least one court to invalidate more restrictive local ordinances (DiFranza 1993). Both the IOM (Lynch and Bonnie 1994) and the Working Group of State Attorneys General (1994) recommend that state laws include language specifically stating that they are not meant to preempt stronger local ordinances.

One of the U.S. health objectives for 2000 was to reduce to zero the number of states with preemptive smoke-free indoor air laws (Objective 3.25) (National Center for Health Statistics 1997); an objective proposed for 2010 is to reduce the number of states with any preemptive tobacco control laws to zero (USDHHS 2000a). Most states have preemptive tobacco control laws, and 19 have preemptive provisions for minors' access laws. Thus, achievement of the 2000 objective is unlikely (CDC 1999).

Litigation Approaches

Introduction

Society deploys various regulatory controls to confront risks arising from dangerous products or practices. As has been discussed in previous sections in this chapter, these controls include those intrinsic to the practice itself, such as preventive design and safety procedures built into a product or into the technology of its use, as well as external regulation by government agencies and private parties, such as property owners, employers, or insurers. Certain institutions also absorb and spread losses when a practice does result in injuries, such as relief institutions that assist victims and social and private insurance that compensates the injured. Another regulatory control, introduced here, is private law (referred to generally in this section as litigation and held distinct from the more sweeping legislative scope of public law). In the course of vindicating the claims of injured persons, private law generates, broadcasts, and reinforces safety standards. The various controls are not independent but interact in complex ways. For example, preventive design may stem from the imposition or anticipation either of government regulation or of liability

established through private law; similarly, employers or insurers may institute preventive regulations to limit the cost of remedial measures resulting from private law decisions.

Private Law as a Means of Risk Control

Private law remedies combine existing public standards with a public institution—the courts—that is passive in accepting these standards but is also, accordingly, reactive when the standards change. In private law, the initiative to enforce a change or decision is shifted away from an enterprise or a government to private actors—typically, victims or their surrogates. This diffusion of the enforcement initiative is matched by the decentralized pronouncement of liability standards, which are less often established at a given moment than they are formulated over time, largely by courts responding incrementally to specific cases brought before them. Private law standards are context sensitive, incorporating changing popular values and understandings. In the United States, this incorporation of popular views is accelerated by the use of civil juries.

Tort as a Private Law Control

In the tort system, which applies to actionable wrongful acts other than breach of contract (*tort* is a Middle English word meaning "injury"), information about instances in which injurers (and their insurers) are forced to compensate victims coalesces slowly into a body of knowledge that, acknowledged by other potential injurers, generates various preventive effects (Calabresi 1970). However, because each instance of remedy involves individualized determination of liability and damages, the production of these preventive effects by the tort system is highly inefficient. The process is also very expensive, because a large portion of the money that the tort system extracts from injurers is consumed by the tort process itself (Kakalik and Pace 1986). Nonetheless, although relatively inefficient for compensating specific classes of injuries, the tort system effectively generates overall preventive effects and is flexible and adaptive (American Law Institute 1991; Galanter 1994).

U.S. Reliance on Private Law Controls

Societies differ in the way they deploy this alternative set of controls. The United States has tended to rely more heavily on private law controls than do other industrialized countries (Kagan 1991; Galanter 1994). The expansive U.S. system of private remedy is conjoined with a lesser emphasis on administrative controls and social insurance (Pfennigstorf and Gifford 1991).

Where excessive risks are associated with a product or practice, the U.S. tort system typically acts to shift part of the cost of these risks back to the producers and users. Such litigation campaigns follow a familiar course toward preventing particular risks: after a period of innovation and experimentation, a few successful lawsuits provide a model and incentive for other lawyers and plaintiffs; the threat of a mounting tide of litigation (and occasionally an actual tide) leads to a flow of compensation, modifications in the use or design of the product, and occasionally bankruptcy of the defendant; and eventually the litigation abates as product modifications break the link to risk (McGovern 1986; Galanter 1990; Sanders 1992; Hensler and Peterson 1993; Durkin and Felstiner 1994; Schmit 1994).

Potential Public Health Benefits of Tobacco Litigation

As applied to lawsuits against the tobacco industry, private litigation has the potential to do the following:

- Enlist a new cadre of skilled, resourceful, and relentless advocates on the side of reducing tobacco use—the incentive being the contingency fees plaintiffs' attorneys would receive if they won or settled cases against the industry.
- Force the industry to raise prices dramatically to cover their actual or anticipated liabilities. Studies suggest that such higher costs would lower tobacco consumption—especially among children and teenagers, who are more price-sensitive than adults (Daynard 1988; Hanson and Logue 1998). For example, after Philip Morris raised its wholesale cigarette prices by 10 percent in one year to cover legal settlements with four states, a Wall Street stock analyst estimated that these increases reduced overall consumption of [Philip Morris] cigarettes by nearly 3 percent (Hwang 1998).
- Encourage the manufacture of safer (to the extent possible) products, which have lower liability risks. For instance, a noncarcinogenic nicotine delivery device, though retaining the health risks of nicotine, could create less liability both to individual users and to third-party health care payers.
- Discontinue dishonest practices that increase the risk of liability, especially for punitive damages.

Deterring such "intentional torts" is a main goal of the civil justice system.

- Delegitimize the industry politically by exposing patterns of unsavory practices. For example, many politicians discontinued taking tobacco company contributions in the late 1990s, largely because the discovery process in pending lawsuits revealed industry misconduct (Abramson 1998). Loss of political esteem or loyalty would ease the way for effective tobacco control legislation.
- Educate the public about the risks of tobacco use, since lawsuits attract extensive, free media coverage.
- Compensate injured parties, including smokers, afflicted nonsmokers, their families, and the health care compensation system (Daynard 1988).

The First Two Waves of Tobacco Litigation

Starting in the 1950s, injured smokers tried to use the emergence of product liability to secure remedies from the tobacco companies. During the first two waves of tobacco litigation, hundreds of lawsuits were filed against U.S. tobacco companies by individuals claiming tobacco-related injuries to health. (By one count, 808 cases were filed between 1954 and 1984 [Bernstein Research 1994].) Not one of the claims resulted in any plaintiff, or plaintiff's attorney, receiving any financial compensation.

The First Wave

The first wave of tobacco litigation was launched in 1954, inspired by the appearance in the early 1950s of scientific reports and popular magazine articles that indicated that smoking caused lung cancer. Although convinced that this new information would weigh in as evidence of culpability, the plaintiffs' attorneys were overmatched. The tobacco companies presented a concerted defense in every claim, no matter how small the damages sought, and through all stages of litigation. From the earliest cases, the tobacco companies retained lawyers from the country's most prestigious law firms and directed them to spare no expense in exhausting their adversaries' resources before trial (Rabin 1993). Plaintiffs' attorneys, typically operating from small practices under a contingent fee arrangement with clients who could not afford protracted litigation, found themselves both outnumbered and outspent on all fronts.

Only a handful of the first-wave tobacco cases ever came to trial. Those that did found the courts unwilling to impose strict liability on the tobacco industry. Plaintiffs typically brought suit against tobacco companies under one or both of two theories: negligence and implied warranty. Under a theory of negligence, plaintiffs tried to show that the tobacco companies knew enough about the potential harm of tobacco products to induce them to "engage in [further] research . . . adopt warnings, or, at a minimum, refrain from advertising that suggested the absence of any health concerns" (Rabin 1993, p. 114). However, because plaintiffs' attorneys could offer no evidence at that time that the tobacco industry was aware of the potential harm of their products, this negligence theory met with failure.

Most plaintiffs' cases relied on the theory of implied warranty, which imputes strict liability even in the absence of negligence. The mere marketing of a product that was not of merchantable quality or reasonably fit for use would thus support legal recovery of damages (Rabin 1993). The plaintiff's ability to rely on negligence or implied or express warranty was greatly constrained by two circumstances: since 1965, health warnings had been mandated on tobacco products and on some advertising (see "Cigarette Warning Labels," earlier in this chapter), and the tobacco industry had avoided making direct claims that their products had positive health effects. Since early 1966, then, smokers could no longer argue (or at least not easily) that the tobacco companies had not warned them of the hazards posed in using their products (Schwartz 1993). The doctrine of implied warranty, in particular, thus seemed invalid to plaintiffs who were seeking damages from the tobacco industry.

In general, the courts of that time were unreceptive to strict liability arguments. The courts regarded the manufacturer as "an insurer against foreseeable risks—but not against unknowable risks" (*Lartigue v. R.J. Reynolds Tobacco Co.*, 317 F.2d 19, 37 [5th Cir. 1963], *cert. denied*, 375 U.S. 865 [1963]) or against "the harmful effects of which no developed human skill or foresight can afford" (p. 23). The American Law Institute, a prestigious and influential association of lawyers, judges, and academics, adopted this outlook in its 1973 commentary on section 402A of the Restatement (Second) of Torts, which deals with strict liability for defective products. The nonbinding yet authoritative influence of the restatement sounded "the death knell for the first wave of tobacco litigation" (Rabin 1993, p. 117; Givelber 1998).

The Second Wave

A second wave of tobacco litigation began in 1983, inspired by the success that lawyers had recently achieved in suing asbestos companies: they had not only recovered substantial verdicts (and fees) but also effectively ended the production and use of asbestos in the United States.

As was the case with the first wave of tobacco litigation, in the second wave the "lawyers' litigation strategies rather than their legal arguments . . . constituted the first line of defense" (Rabin 1993, p. 121). The tobacco industry continued to successfully pursue the strategy it had developed during the first wave, taking countless depositions and filing and arguing every motion it could, thus threatening to inflict heavy financial losses on any plaintiff's attorney (Daynard 1994a,b). This strategy was summarized by J. Michael Jordan, an attorney who successfully defended R.J. Reynolds Tobacco Company in the 1980s, in an internal memo to his colleagues: "[T]he aggressive posture we have taken regarding depositions and discovery in general continues to make these cases extremely burdensome and expensive for plaintiffs' lawyers. . . . To paraphrase General Patton, the way we won these cases was not by spending all of [RJR]'s money, but by making that other son of a bitch spend all of his" (*Haines v. Liggett Group, Inc.*, 814 F. Supp. 414, 421 [D.N.J. 1993]).

To try to overcome the disparity of legal resources that had overwhelmed the first-wave cases, plaintiffs' attorneys sometimes pooled resources on a case-by-case basis. The Tobacco Products Liability Project, a nonprofit advocacy group established at Northeastern University in 1984 to encourage lawsuits against the tobacco industry as a public health strategy, served as a clearinghouse of relevant information for attorneys, potential plaintiffs, medical experts, and the media. It began holding annual conferences in 1985, at which participants share information about new legal tactics, as well as solve problems about emerging difficulties.

Besides pooling resources and sharing strategies, plaintiffs' attorneys needed to find an effective legal strategy. To find a new theory, plaintiffs' counsel shifted their focus from implied or express warranty to strict liability, which became a more attractive strategy as courts applied strict liability and comparative fault principles to defective product cases concerning many other products (Edell 1987; Rabin 1993). Smokers' awareness of risks and, accordingly, their "freedom of choice" (Rabin 1993, p. 122) became the linchpins of the tobacco industry's defense against these liability tactics. Though consistently denying the reality of the risks, the tobacco industry paradoxically argued (with great success) that smokers had freely chosen to smoke and had thereby assumed what risks there might be of smoking and had negligently contributed to their own harm. To prove the plaintiff's assumption of risk, counsel for the tobacco industry generally needed to show that the injured smoker, knowing the dangers and risks involved in smoking, chose to smoke anyway. To prove contributory negligence, the tobacco defense typically showed that, by smoking, the injured smoker breached a personal duty to protect himself or herself from injury and thereby contributed to the harm suffered (Kelder and Daynard 1997).

Just as it had aided the tobacco industry in negating charges of negligence and warranty during the first wave of tobacco litigation, the Federal Cigarette Labeling and Advertising Act's imposition of a warning label on cigarette packaging and advertising greatly strengthened the industry's countercharge that plaintiffs had legally assumed their own health risk and were guilty of contributory negligence. As a result, jurors were responsive to the industry's defense. In essence, jurors tended to blame plaintiffs for their disease instead of identifying the tobacco industry as the makers of the product that caused the disease (Daynard 1994a,b). When counsel for plaintiffs pointed to the addictive nature of tobacco, which arguably limited the smoker's ability to make a free choice, defense counsel rebutted by pointing to the large number of former smokers who successfully quit (Rabin 1993).

Taking the freedom-of-choice defense one step further, defense counsel typically drew on, and presented to the jury, information demonstrating that the claimant's lifestyle was overly risky by choice or was even in some way immoral. By presenting this somewhat extraneous material obtained through aggressive pretrial discovery, the defense "appear[ed] to have had considerable success in trying not just the plaintiff's decision to smoke but his or her character more generally" (Rabin 1993, p. 124). The resulting "full-dress morality play" seemed to have effectively negated any jury sympathy for the plaintiff's plight (p. 124).

The case that culminated and best symbolized the uphill battle of second-wave plaintiffs was filed by Rose Cipollone, a dying smoker, in 1983. The case reached the jury in 1988, four years after her death, and the jury awarded the plaintiffs $400,000. But this verdict, subsequently overturned on appeal, was only one moment in a protracted legal battle. As one analyst describes, in *Cipollone v. Liggett Group Inc.*, ". . . over 100 motions were filed, and most of the motions were argued. There were also four interlocutory applications, one resulting in the grant of an appeal and the Third

Circuit's initial decision on preemption, . . . an appeal from the final judgment to the Court of Appeals following a trial of about four months, . . . and two petitions for *certiorari* to the Supreme Court of the United States, one of which was granted resulting in the historic argument before that Court" (Kelder 1994, p. 4).

After nearly a decade, *Cipollone*, the quintessential second-wave case, was sent back to the trial court by the United States Supreme Court. The Court ruled that although the Federal Cigarette Labeling and Advertising Act of 1965 did not invalidate any claims in private litigation, its successor, the Public Health Cigarette Smoking Act of 1969, preempted any claims based on the manufacturers' failure to warn after 1969 in its advertising and promotions (*Cipollone v. Liggett Group Inc.*, 505 U.S. 504, 112 S. Ct. 2608 [1992]). However, the Court left open to the plaintiff the option of proceeding under a wide range of legal theories, including theories of breach of express warranty, defective design, fraudulent misrepresentation, and conspiracy to defraud. But the difficulties of mustering a sufficient showing that such violations by the defendants were the proximate cause of Mrs. Cipollone's injuries (as well as the cause of her death in 1984) persuaded the plaintiff's counsel that there was little likelihood of a significant recovery (Lowell 1992). In 1992, five months after the Supreme Court ruling, the New Jersey federal district court approved the request of the Cipollone estate's lawyer to withdraw from the case.

It had been a lengthy, expensive effort for the plaintiff's counsel: $500,000 in out-of-pocket expenses and approximately $2 million in attorney and paralegal time (Kelder 1994). Posttrial proceedings cost an additional $150,000 in out-of-pocket expenses and $900,000 in attorney and paralegal time. *Time* magazine estimated that the cigarette industry spent at least $75 million defending the *Cipollone* case (Koepp 1988). Michael Pertschuk, co-director of the Advocacy Institute, a public interest group dedicated to reducing tobacco use, has estimated that altogether tobacco companies were spending approximately $600 million per year defending the 50 or so cases pending against them (Stone 1994). Tobacco defendants' reputation for relentless legal battle dissuaded many lawyers from entering the fray. Even formidable litigants such as the asbestos producers refrained from trying to embroil the tobacco manufacturers as being jointly responsible for asbestos injuries (Rabin 1993).

The Aftermath of the First Two Waves

The collapse of the *Cipollone* case was widely viewed as signaling the end of the second wave of tobacco litigation. Commentators advanced various explanations for the failure of tobacco litigation, including superior lawyering resources, coordination, and tactics (Rabin 1993), as well as popular resistance in the form of jury reluctance to award damages to smokers (Schwartz 1993). Many observers concluded that product liability litigation had a limited role to play in the regulation of tobacco. Rabin (1993) found that tobacco presents an instance of "the effective limits of tort law," because "tort law and tort process seem to conspire against any effective role for the tobacco litigant" (p. 127). Schwartz (1993) concurred "that tort law does not have a major role to play in the development of public policy for smoking in the 1990s" (p. 132).

At that juncture, tobacco litigation seemed to illustrate that the incidence and outcome of litigation are influenced by the identity, resources, and status of the parties and by the incentives and strategies of their lawyers. Striking differences have been noted between the large organization with a continuing interest in an area of legal controversy and the individual litigant who typically seeks a remedy only once (Galanter 1974). One-time litigants tend to be represented by lawyers who practice in smaller units that have less capacity for coordination and less capacity to invest strategically in litigation. The monetary stakes—and thus the incentives—are also lower for these smaller litigants than for their corporate opponents, who can extract full benefit from the information and experience generated by litigation expenditures (Galanter 1974; Schwartz 1993).

Nonetheless, at the end of the second wave of tobacco litigation, it was argued that the tobacco industry was not untouchable and that its proud record of never, at that point, having paid a penny to its victims masked a high vulnerability to litigation (Daynard 1988, 1993a,b, 1994a,b; Daynard and Morin 1988). The industry's "scorched earth" litigation tactics (Daynard 1994a) had indeed made suing tobacco companies prohibitively expensive for most plaintiffs and their attorneys. Also, the industry's firm and widely publicized policy of never settling cases further discouraged litigation, because plaintiffs' attorneys, working on contingency fees, realized that they could not expect to be paid unless and until they had succeeded at trial and on subsequent appeals. Furthermore, the low volume of cases in the first and second waves allowed the industry to concentrate its legal resources against the few plaintiffs' attorneys who ventured forth against it.

But a very different scenario was also possible. Although the low-volume litigation environment of the first and second waves favored the defendants, a high-volume environment might favor plaintiffs. As